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| **Learning will include the development of the following knowledge, concepts and skills** | | **Possible learning outcomes in**  **science** |
| **Transdisciplinary theme**  **Who we are**  An inquiry into the nature of the self; beliefs and values; personal, physical, mental, social and spiritual health; human relationships including families, friends, communities, and cultures; rights and responsibilities; what it means to be human.  **Central idea**  Growth and change have made me who I am.  **Key concepts**   * Reflection * Change   **Related concepts**   * Change * Growth   **Lines of inquiry**   * Measurement of living things as evidence of growth * How and why my abilities have changed since Prekinder * How and why my responsibilities evolve | **Science strand(s)**  Living things  **Science skills**  b. Use a variety of  instruments and tools to  measure data accurately  c. Use scientific vocabulary  to explain their  observations and  experiences  d. Identify or generate a  question or problem to be  explored (all units)  f. Make and test predictions  g. Interpret and evaluate  data gathered in order  to draw conclusions | **The student will be able to:**   * Collect data based on their physical changes using different instruments of measurement. * Compare compiled data to draw conclusions based on their physical growth. * Observe and describe changes in their development and that of other living things |

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| **Learning will include the development of the following knowledge, concepts and skills** | | **Possible learning outcomes in**  **science** |
| **Transdisciplinary theme**  **Where we are in place and time**  An inquiry into orientation  in place and time; personal  histories; homes and journeys;  the discoveries, explorations  and migrations of humankind;  the relationships between  and the interconnectedness  of individuals and civilizations,  from local and global  perspectives.  **Central idea**  Personal histories tell us about where families come from.  **Key concepts**   * Causation   **Related concepts**   * Origin   **Lines of inquiry**   * My personal history * My family in the past and now * Places where my family comes from | **Science strand(s)**  Materials and matter  **Science skills**  d. Identify or generate a  question or problem to be  explored  e. Plan and carry out  systematic investigations,  manipulating variables as  necessary  g. Interpret and evaluate  data gathered in order  to draw conclusions | **The student will be able to:**   * Describe the origin of some materials. |

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| **Learning will include the development of the following knowledge, concepts and skills** | | **Possible learning outcomes in**  **science** |
| **Transdisciplinary theme**  **How we express ourselves**  An inquiry into the ways in  which we discover and express  ideas, feelings, nature, culture,  beliefs and values; the ways in  which we reflect on, extend  and enjoy our creativity; our appreciation of the aesthetic.  **Central idea**  We all have experiences and stories to share and there are many ways to tell them.  **Key concepts**   * Perspective * Function   **Related concepts**   * Interpretation * Communication   **Lines of inquiry**   * Elements and structure of a story * Different ways of telling a story * How our bodies communicate (physiological reactions) | **Science strand(s)**  Living Things  **Science skills**  a. Observe carefully in order to gather data  c. Use scientific vocabulary  to explain their  observations and  experiences  d. Identify or generate a  question or problem to be  explored  g. Interpret and evaluate  data gathered in order  to draw conclusions | **The student will be able to:**   * Explain how different parts of their body respond to emotions. |

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| **Learning will include the development of the following knowledge, concepts and skills** | | **Possible learning outcomes in**  **science** |
| **Transdisciplinary theme**  **How the world works**  An inquiry into the natural world  and its laws; the interaction  between the natural world (physical and biological) and human societies; how humans use their understanding of scientific principles; the impact of scientific and technological advances on society and on the environment.  **Central idea**  An understanding of the properties of materials allows us to use them responsibly.  **Key concepts**   * Form * Responsibility   **Related concepts**   * Properties * Initiative   **Lines of inquiry**   * Properties and uses of materials * Reducing, reusing, recycling | **Science strand(s)**  Materials and matter  **Science skills**  c. Use scientific vocabulary  to explain their  observations and  experiences  d. Identify or generate a  question or problem to be  explored  e. Plan and carry out  systematic investigations,  manipulating variables as  necessary  g. Interpret and evaluate  data gathered in order  to draw conclusions | **The student will be able to:**   * Identify and name the different materials objects are made of * Recognize some properties of materials * Explain the importance of applying the 3 Rs |
| **Learning will include the development of the following knowledge, concepts and skills** | | **Possible learning outcomes in**  **science** |
| **Transdisciplinary theme**  **How we organize ourselves**  An inquiry into the interconnectedness of human-made systems and communities; the instruction and function of organizations; societal decision-making; economic activities and their impact on humankind and the environment.  **Central idea**  People’s attitudes affect the harmony in a community.  **Key concepts**   * Connection * Causation   **Related concepts**   * Harmony * Consequences   **Lines of inquiry**   * Characteristics of a neighbourhood and functions of its members * Ways in which attitudes affect a neighbourhood community * Consequences of natural disasters on a community and how to prepare for them | **Science strand(s)**  Earth and space  **Science skills**  d. Identify or generate a  question or problem to be  explored  f. Make and test predictions  g. Interpret and evaluate  data gathered in order  to draw conclusions | **The student will be able to:**   * Explore the consequences some natural phenomena have on human habitats |

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| **Learning will include the development of the following knowledge, concepts and skills** | | **Possible learning outcomes in**  **science** |
| **Transdisciplinary theme**  **Sharing the planet**  An inquiry into rights and  responsibilities in the struggle  to share finite resources with  other people and with other  living things; communities  and the relationships within  and between them; access to  equal opportunities; peace and  conflict resolution.  **Central idea**  Forests provide biodiversity and resources and therefore we need to conserve them.  **Key concepts**   * Connection * Responsibility   **Related concepts**   * Diversity * Conservation   **Lines of inquiry**   * Forests as a resource for the planet * How humans and animals share space and affect each other * The forest as an ecosystem | **Science strand(s)**  Living Things  **Science skills**  a. Observe carefully in order to gather data  d. Identify or generate a  question or problem to be  explored  f. Make and test predictions  g. Interpret and evaluate  data gathered in order  to draw conclusions  h. Consider scientific  models and applications  of these models  (including their  limitations) | **The student will be able to:**   * Explain how human activities can have positive or adverse effects on the environment * Propose possible solutions to environmental situations      * Name the different elements in a forest and their interactions * Explain animal adaptations to their environment |